

Appendix A2.2: Strategic Environmental Assessment (SEA) Monitoring Framework

Table 1: SEA References

A9 Dualling Programme – SEA Monitoring Framework – Design Section Constraints						
A9 Design Section – South	Design Project – Tay Crossing to Ballinluig (approximately 8.2km)					
SEA References:						

SEA Environmental Report - Section 5

Environmental Report Addendum - Section 3, Section 4 and:

Appendix B (Detailed Assessment Matrices, Sections B1) - Appendix C (Revised GIS Mapping - Ancient Woodland Inventory)

Appendix D (Indicative Junction Locations Constraints Review Tables) - Appendix E (HRA and Programme-level Appropriate Assessment (AA) Report)

Appendix F (Strategic Landscape Review) – Appendix G (Strategic Flood Risk Assessment)

Table 2: SEA Monitoring Framework

SEA	Discipline of	27.0	Recommendations fo	r later DMRB Stages	Record ho	w addressed at:
Identified Constraints	Constraint	SEA Comment	DMRB Stage 2	DMRB Stage 3	DMRB Stage 2	DMRB Stage 3
Special Area of Conservation (SAC)	River Tay SAC Approximate crossing refs.: NO004438 NN000481 NN993498	Refer to ER Addendum Appendix E, HRA and Programme-level Appropriate Assessment (AA) Report. Embed range of strategic principles on biodiversity, and avoidance of SAC site boundaries and impacts wherever possible. Any crossings of the River Tay SAC, or encroachment upon the SAC boundaries, will require consideration via project level Habitats Regulations Appraisal (HRA). Drainage/SuDS outfalls to the River Tay SAC, and its tributaries are also likely to require consideration via project level HRA. Should include consultation with Scottish Environment Protection Agency (SEPA) and Tay Fisheries Board on drainage, SuDS and the Water Environment (Controlled Activities) (Scotland) Regulations	Secure early consultation with SNH and other relevant stakeholders (as agreed with Transport Scotland and the A9 Dualling Environmental Steering Group) to agree project level HRA Screening requirements for crossings of, and drainage to, the River Tay SAC. Consultation with SNH to determine alternative alignment option impacts on River Tay designations, to inform selection of the preferred dualling alignment. SNH consultation to advise requirements for surveys and mitigation for qualifying interest species and means to address pollution/sedimentation risks and effects on river geomorphology, to inform the approach to more detailed Appropriate Assessment, as required to support DMRB3 detailed design and Environmental Statement.	Project level HRA/AA must be completed and agreed with SNH in advance of Stage 3 Environmental Statement finalisation to inform final preferred alignment design. To include means to address potential spillage, run-off, pollution and sedimentation/hydrological risks/effects on river geomorphology, with mitigation, management plans and exclusion zones/timescales for qualifying species. Preferred alignment design and Environmental Statement to include appropriate record of consultation, all further studies undertaken and any mitigation or compensatory works required.	Regular meetings with the Environmental Steering Group (ESG), which includes SNH, have been held and SNH has been consulted for specific topic items such as the HRA approach. Baseline data gathering required for Stage 2 was agreed through the forum of the ESG and compiled in an Outline Approach to Consistency in A9 Ecology Survey Extents document. Tay District Salmon Fisheries Board (TDSFB) have been consulted and their data included in our Stage 2 Assessment. A minimum of two levels of SuDS for all mainline road drainage prior to discharge to receiving watercourses, as agreed with SEPA and SNH. Three levels will be considered for designated sites where practicable, in agreement with SNH. Geomorphological input will inform the design of watercourse crossing structures, any necessary channel realignment and outfall location, at	Regular meetings with the ESG, which includes SNH, have been held. SNH has been consulted in relation to specific items such as the HRA approach. DMRB Stage 3 assessments detailed in the ES were informed by: DMRB Stage 2 assessments; further surveys; liaison with the appropriate consultees (including TDSFB, SNH and SEPA); and cross-discipline liaison as appropriate (including geomorphology and hydrogeology). Mitigation workshops have included consideration of outfall design to avoid adverse effects on site integrity. Chapter 7 (Scoping and Consultation) and the accompanying Appendix A7.2 (Summary of Consultation Responses) provides further information regarding consultation with TDSFB, SNH and SEPA. Two levels of SuDS treatment have been identified as a minimum requirement for the proposed scheme. On a number of drainage catchments, a second level of treatment has been achieved through the adoption of a proprietary system (e.g. hydrodynamic vortex separator) as opposed to

A9 Dualling Programme: Tay Crossing to Ballinluig DMRB Stage 3 Environmental Statement



SEA	Discipline of	051.0	Recommendations fo	r later DMRB Stages	Record ho	w addressed at:
Identified Constraints	Constraint	SEA Comment	DMRB Stage 2	DMRB Stage 3	DMRB Stage 2	DMRB Stage 3
		2011 (as amended (CAR) aspects. Refer to Scottish Natural Heritage (SNH)'s River Tay SAC advice to developers at: http://www.snh.org.uk/pdfs/publications/designatedareas/River%20Tay%20SAC.pdf	SEPA should be included in discussion on levels of SuDS treatment, CAR requirements and opportunities to improve crossings for fish passage (e.g. flood risk implications). Tay Fisheries Board should be included in terms of protected species/spawning beds, etc.		DMRB Stage 3. Opportunities to improve/maintain fish passage through culverts will be undertaken at DMRB Stage 3. CAR authorisation requirements will be discussed and agreed with SEPA at DMRB Stage 3.	conventional SuDS (e.g. a basin). This is due to these drainage runs being considered 'constrained sites' where the adoption of a second level of conventional SuDS would have resulted in the loss of ancient woodland, significant landscape impacts and/or increased flood risk. Designs of the Dowally Burn crossings have been informed by multidisciplinary discussions to minimise implications for the SAC. Culvert designs to improve/maintain fish passage were informed by DMRB Stage 3 surveys, and designs are being developed at DMRB Stage 3 in consultation with geomorphology, hydrology and structures. The construction of the proposed scheme will be required to comply with all relevant environmental legislation and protection such as the Water Environment (Controlled Activities) (Scotland) Regulations 2011, relevant Pollution Prevention Guidelines (PPGs) and Guidance for Pollution Prevention (GPPs) aimed at managing runoff, accidental spillage and sediment release and other good practice guidance. Input to the HRA included a geomorphological assessment of the River Tay which involved considering the geomorphological processes and characteristics that influence the physical habitat conditions supporting SAC qualifying species. Input to the HRA also included River Tay bank stabilisation works.
Special Area of Conservation (SAC)	Shingle Islands SAC	Refer to ER Addendum Appendix E, HRA and Programme-level Appropriate Assessment (AA) Report. Multiple site designation, generally within or alongside the boundaries of the River Tay SAC.	Embed range of strategic principles on biodiversity, and avoidance of SAC site boundaries and impacts wherever possible. Confirm with SNH that this SAC is not affected directly by alternative alignment options.	DMRB3 EIA and HRA may have to include this SAC in terms of drainage design/SuDS outfalls and construction level pollution controls. SNH may require confirmation that SuDS treatment solutions and construction level mitigation	Strategic principles have been applied to the DMRB Stage 2 assessment. The DMRB Stage 2 route options do not encroach on the SAC site boundaries.	Regular meetings with the ESG, which includes SNH, have been held and SNH has been consulted regarding the HRA approach. A summary of each meeting is provided in Appendix A7.2 (Summary of Consultation Responses).

DMRB Stage 3 Environmental Statement



SEA	Discipline of		Recommendations fo	r later DMRB Stages	Record ho	w addressed at:		
Identified Constraints	Constraint	SEA Comment	DMRB Stage 2	DMRB Stage 3	DMRB Stage 2	DMRB Stage 3		
Site of Special Scientific Interest (SSSI)	Shingle Islands SSSI	Shingle Islands SAC/SSSI is unlikely to be directly affected by the dualling works footprint, but could potentially be affected in terms of construction site runoff and pollution controls as well as road drainage/SuDS outfalls.	Confirm with SNH whether DMRB3 requires inclusion of Shingle Islands SAC in project level HRA.	is sufficient to ensure no Adverse Effect on Site Integrity due to A9 dualling. Stage 3 reports may also require separate consideration of impacts on, and mitigation for the SSSI designation, including any SSSI consents required.				
Special Protection Area (SPA)	Forest of Clunie SPA	Refer to ER Addendum Appendix E, HRA and Programme-level Appropriate Assessment (AA) Report. No direct impact anticipated as this site is likely to be out with the extent of dualling works; however, as the SPA is protected for bird species, potential for disturbance may have to be considered.	Embed range of strategic principles on biodiversity, and avoidance of SPA site boundaries and impacts wherever possible. Where possible secure early consultation with SNH to determine whether this SPA should be included in DMRB3 stage HRA.	DMRB3 EIA and HRA may have to include this SPA in terms of the potential for disturbance to, and any necessary exclusion zones for, bird species. Seek SNH advice on appropriate measures if HRA is required.	Strategic principles have been applied to the DMRB Stage 2 assessment. The DMRB Stage 2 route options do not encroach on the SPA site boundaries.	The DMRB Stage 3 route option does not encroach on the SPA site boundaries.		
Ancient Woodland of semi- natural origin AW (SNO)	c. 7 x AWI (SNO) (Category 1a & 2a)	A mixture of AWI woodlands lie to both sides of the existing A9 in this section. Embed range of strategic principles on biodiversity, woodland and avoidance where possible. However, as much of this section is	Secure early consultation with SNH and other relevant stakeholders (as agreed with Transport Scotland and the A9 Dualling Environmental Steering Group) to determine alternative alignment option impacts on all AWI woodlands, to inform	Preferred alignment design and Environmental Statement to include appropriate record of consultation, all further studies undertaken and any mitigation or compensatory works required.	Regular meetings with the ESG have been held. Consultation with SNH has been undertaken during ESG meetings. Requirements for additional surveys of ancient woodland sites have been determined.	Regular meetings with the ESG have been held. Consultation with SNH has been undertaken during ESG meetings and further communications or meetings as required. Further information on consultation is provided in Chapter 7 (Consultation and Scoping) and Appendix A7.2 (Summary of Consultation Responses).		
Woodland other/On Roy Map AW (Roy)	(Roy) (Category 3)	bordered by AWI woodlands on both sides, secondary aim must be to minimise losses and fragmentation where woodlands are unavoidable. SNH advise that categories 1a, 2a	selection of the preferred dualli alignment. Determine potential requiremer for additional surveys and studi	selection of the preferred dualling alignment. Determine potential requirements for additional surveys and studies	selection of the preferred dualling alignment. Determine potential requirements for additional surveys and studies	election of the preferred dualling gnment. Where AWI woods are unavoidable, aim to minimise fragmentation and maintain woodland integrity.	considered in detail at DMRB3. AWI mapping has been supplemented with NWSS data at DMRB2.	An assessment of the impact of the proposed scheme on ancient woodland sites has been undertaken as discussed in Chapter 12 (Ecology and Nature Conservation) and Chapter 13 (Landscape).
Ancient Woodland Long established of plantation origin AW (LEPO)	c. 3 x AWI (LEPO) (Category 2b)	and 3 of Ancient Woodland (AW) are irreplaceable; however, category 2b may be of lower conservation value.	unavoidable and where compensation may be required. Consider mechanisms to provide compensatory habitat solutions that will deliver an equal or greater amount of habitat to the standard of that which is lost. Ancient Woodland Inventory	include woodland edge effects Where habitat compensation is not achievable in situ, Environmental Statement should identify where compensation will be delivered.		Woodland edge effects and measures to minimise fragmentation have been taken into consideration in woodland planting mitigation. Chapter 8 (People and Communities - Community and Private Assets) considers the risk of windthrow and exposing new woodland edges. The wind damage risk status is assessed to be low for all forest		

DMRB Stage 3 Environmental Statement



SEA	Discipline of	200	Recommendations fo	r later DMRB Stages	Record ho	w addressed at:
Identified Constraints	Constraint	nt SEA Comment	DMRB Stage 2	DMRB Stage 3	DMRB Stage 2	DMRB Stage 3
			mapping should be supplemented with Native Woodland Survey of Scotland (NWSS) data.			coupes. The impacts on loss of woodland including areas of AWI have also been considered and are discussed further in Chapter 19 (Policies and Plans) and Chapter 20 (Cumulative Impacts). Compensatory habitat solutions have been considered in detail at DMRB Stage 3 and have been informed by discussions with landscape architects and use of the woodland connectivity tool. To identify suitable areas for planting, this tool has been used along with consideration of other factors such as: Iandscape requirements; objectives for maintaining and enhancing permeability for species using woodland; and the conservation objectives of adjacent designated sites that are designated for features other than woodland. Figure 13.5 (Chapter 13, Landscape) provides proposed ecological and landscape mitigation which includes, but is not limited to, compensatory planting areas and areas of woodland to be retained.
Historic Environment including Unscheduled Archaeology	Scheduled Monuments and Listed Buildings identified by SEA are discussed below	Unscheduled archaeology was outwith the scope of route-wide SEA studies and should be considered at an early stage in consultation with Historic Scotland and the relevant Local Authority archaeology teams. Should include consideration of non-designated historic parks and gardens	Secure early consultation with Historic Scotland, Local Authority archaeology or heritage team and obtain historic environment records to determine the location of any locally important sites and features. Route alignment studies to be informed by consultations to avoid such sites in the first instance, and to determine scope of further studies where avoidance is not possible.	Preferred alignment design and Environmental Statement to include appropriate record of consultation, all further studies undertaken and any mitigation required for unscheduled archaeology.	Undesignated archaeological remains, historic buildings and historic landscape have been considered in the DMRB Stage 2 assessment. Consultation was undertaken with Historic Environment Scotland (HES) and Perth & Kinross Heritage Trust.	Undesignated archaeological remains, historic buildings and historic landscape have been considered in the DMRB Stage 3 assessment as discussed in Chapter 15 (Cultural Heritage), with consultation on these assets undertaken with HES, PKC and the Perth & Kinross Heritage Trust (PKHT). A description of the detailed consultation undertaken at DMRB Stage 3 is provided in Chapter 7 (Consultation and Scoping) which is accompanied by Appendix A7.2 (Summary of Consultation Responses).

DMRB Stage 3 Environmental Statement



SEA	Discipline of	071.0	Recommendations fo	or later DMRB Stages	Record ho	w addressed at:
Identified Constraints	Constraint	SEA Comment	DMRB Stage 2	DMRB Stage 3	DMRB Stage 2	DMRB Stage 3
Scheduled Monuments (SM)	Clachan More, two standing stones, Dowally NO000479	Particular historic environment pinch point at Dowally. Need to balance SM and LB issues with River Tay SAC, flood plain and Ancient Woodland (SNO, 1a and 2a) constraints. Aim to avoid direct impacts on SM and LBs, and maximise clearance between heritage features and dualling works.	Embed range of strategic principles on historic environment and avoidance where possible. Where avoidance is not possible within the 200m online corridor, DMRB2 alignment studies should consider local alternatives outwith the 200m corridor. Secure early consultation with Historic Scotland, Local Authority archaeology or heritage team and	Preferred alignment design and Environmental Statement to include appropriate record of consultation, all further studies undertaken, assessment of impacts on features and their setting, appropriate mitigation measures and any construction stage monitoring required, to the satisfaction of Historic Environment Scotland.	No DMRB Stage 2 options developed for Project 03 will physically impact Clachan More, two standing stones. However, given the close proximity of the asset, there is potential for all options to result in accidental damage during construction. Potential impacts on the setting of the asset and the listed buildings Dowally, St Anne's Church and Churchyard, and 2, 3 & 4 Dowally Village were also	Cultural heritage input has been made to the development of landscape and ecological mitigation plans to ensure that any potential impacts on cultural heritage assets, both physical and on setting, have been taken into consideration. These mitigation plans are shown on Figure 13.1 and described in Chapter 13 (Landscape) and Chapter 12 (Ecology and Nature Conservation). There are no significant impacts on the
Listed Building LB (Cat B)	Dowally, St Anne's Church and Churchyard LB 337059	Adjustment in dualling alignments should aim to balance avoidance of heritage features and other constraints, and to minimise effects on setting, wherever possible.	other relevant stakeholders (as agreed with Transport Scotland and the A9 Dualling Environmental Steering Group), to present local options and determine their requirements/recommendations for additional studies/surveys to		identified, and broad recommendations for mitigation were presented. Secure early consultation with Historic Environment Scotland and other relevant stakeholders (as agreed with Transport Scotland and the A9 Dualling ESG) to determine alternative alignment option impacts on this	Clachan More, two standing stones during construction or operation of the proposed scheme. There will be a slight impact on the setting of the standing stones due to noise and visual impacts associated with construction activities. This impact will be temporary and is limited to the construction phase only.
Listed Building LB (Cat C(S))	2, Dowally Village LB 337060		additional studies/surveys to inform selection of a preferred alignment. Seek agreement on additional studies required for DMRB Stage 3 assessment of visual impact/impact on setting.		heritage feature, to inform selection of the preferred dualling alignment. Where avoidance is not possible within the 200m online corridor, DMRB Stage 2 alignment studies should consider local alternatives outwith the 200m corridor.	Following on from archaeological evaluation by archaeological trial trenching, archaeological excavation would be undertaken prior to construction to provide a permanent record of any affected archaeological remains (Mitigation Item P03-CH3). This mitigation will be agreed in advance with the appointed Curator and Transport Scotland's historic environment advisor.
	3, 4, Dowally Village LB 337060					In addition to detailed excavation, archaeological mitigation to make a permanent record of any affected previously unknown archaeological remains can include strip map and sampling (Mitigation P03-CH8); and archaeological recording during construction (Mitigation Item P03-CH5).

DMRB Stage 3 Environmental Statement



SEA	Discipline of		Recommendations fo	or later DMRB Stages	Record ho	w addressed at:
Identified Constraints	Constraint	SEA Comment	DMRB Stage 2	DMRB Stage 3	DMRB Stage 2	DMRB Stage 3
Scheduled Monuments (SM)	Kindallachan, Cairn NN995497	Particular historic environment pinch point at Kindallachan. Embed range of strategic principles on historic environment and avoidance where possible. Need to balance SM issues with railway, River Tay SAC, flood plain and Ancient Woodland (SNO, 1a) constraints. Aim to avoid direct impacts on SMs	Where avoidance is not possible within the 200m online corridor, DMRB2 alignment studies should consider local alternatives outwith the 200m corridor. Secure early consultation with Historic Scotland, Local Authority archaeology or heritage team and other relevant stakeholders (as agreed with Transport Scotland and the A9 Dualling Environmental Steering Group), to present local	Preferred alignment design and Environmental Statement to include appropriate record of consultation, all further studies undertaken, assessment of impacts on features and their setting, appropriate mitigation measures and any construction stage monitoring required, to the satisfaction of Historic Scotland.	Development of the horizontal and/or vertical alignments and locations of SuDS basins to avoid or reduce impacts on cultural heritage assets. Design development should seek to avoid impacts and where this is not feasible should seek to minimise impacts. Where it is not possible to avoid or reduce the magnitude of impacts during construction or operation.	A Level 3 archaeological earthwork record (Mitigation Item P03-CH4) will be produced prior to a set piece excavation and the dissemination of the results via a staged reporting process as required will be undertaken along with the deposition of an ordered archive at the National Record of the Historic Environment (NRHE) (Mitigation Item P03-CH16). This mitigation would be agreed in advance with HES, the appointed curator and Transport Scotland's bistoric environment.
Scheduled Monuments (SM)	Kindallachan, standing stone NN994499	and maximise clearance between heritage features and dualling works. Adjustment in dualling alignments should aim to balance avoidance of heritage features and other constraints, and to minimise effects on setting, wherever possible.	Steering Group), to present local options and determine their requirements/recommendations for additional studies/surveys to inform selection of a preferred alignment. Embed strategic principles approach to avoid where possible, and discuss Scheduled Monument consent requirements with Historic Scotland should these features prove unavoidable. Seek agreement on additional studies required for DMRB Stage 3 assessment of visual impact/impact on setting.		mitigation such as archaeological excavation and condition monitoring to make a permanent record of the asset should be undertaken.	Transport Scotland's historic environment advisor and will require Scheduled Monument Consent (SMC). To mitigate potential construction impacts on Kindallachan, standing stone a set piece excavation (Mitigation Item P03-CH6) informed by trail trenching (Mitigation Item P03-CH2) and dissemination of the results via a staged reporting process as required, and the deposition of an ordered archive at the NRHE will also be undertaken (Mitigation Item P03-CH16). To mitigate any potential for accidental damage to Kindallachan, standing stone during construction, the asset will be protected as required following discussion between HES and Transport Scotland's appointed contractor and will be clearly demarcated with protective fencing and appropriate signage. In addition, prior to works commencing a photographic survey of the standing stone and scheduled area will be undertaken and again on completion of the works to ensure that the condition of the scheduled area is returned to its previous state (Mitigation Item P03-CH7). These measures would be agreed in advance with HES and will require Scheduled Monument Consent.

DMRB Stage 3 Environmental Statement



SEA	Discipline of	071.0	Recommendations for	or later DMRB Stages	Record ho	w addressed at:
Identified Constraints		SEA Comment	DMRB Stage 2	DMRB Stage 3	DMRB Stage 2	DMRB Stage 3
Scheduled Monuments (SM)	Westhaugh of Tulliemet, cross slab NN988510	Particular historic environment pinch point at Haugh Cottages. Embed range of strategic principles on historic environment and avoidance where possible. Need to balance SM and LB issues with railway, River Tay SAC, flood plain and Ancient Woodland (LEPO 2b on opposite side of carriageway) constraints. Aim to avoid direct impacts on SM and LB, and maximise clearance between heritage features and dualling works.	Secure early consultation with Historic Scotland, Local Authority archaeology or heritage team and other relevant stakeholders (as agreed with Transport Scotland and the A9 Dualling Environmental Steering Group), to present local options and determine their requirements/recommendations for additional studies/surveys to inform selection of a preferred alignment. Embed strategic principles approach to avoid where possible, and discuss Scheduled Monument	Preferred alignment design and Environmental Statement to include appropriate record of consultation, all further studies undertaken, assessment of impacts on features and their setting, appropriate mitigation or compensation measures and any construction stage monitoring required, to the satisfaction of Historic Scotland and other relevant stakeholders.	Secure early consultation with Historic Environment Scotland and other relevant stakeholders (as agreed with Transport Scotland and the A9 Dualling ESG) to determine alternative alignment option impacts on this heritage feature, to inform selection of the preferred dualling alignment. Measures to reduce impacts on the setting of archaeological remains and historic buildings and on historic landscapes could include the following; designing of earthworks to avoid an overly engineered appearance and return as much land as possible to its original use; avoid damage or loss to	To mitigate any potential for accidental damage to Westhaugh of Tulliemet, cross slab 180m SE of) during construction, the asset will be supported as required following discussion between HES and Transport Scotland's appointed contractor and will be clearly demarcated with protective fencing and appropriate signage. The proposed fenced area will be confirmed with HES prior to the erection of any protective fencing and will be located outwith the scheduled area. In addition, prior to works commencing a photographic survey of the standing stone and scheduled area will be undertaken and again on completion of the works to ensure that the condition of the scheduled area is
Listed Building LB (Cat B)	Haugh Cottages, Cross LB 344453 (De-listed by HES 08/06/2016)	Adjustment in dualling alignments should aim to balance avoidance of heritage features and other constraints, and to minimise effects on setting, wherever possible.	consent requirements with Historic Scotland should these features prove unavoidable. Secure early consultation with SNH on Ancient Woodland LEPO class 2b to opposite side of carriageway as dualling to that side may be one option. Seek agreement on additional studies required for DMRB Stage 3 assessment of visual impact/impact on setting.		landscape features such as walls, mature trees and field systems. Recording the current condition and site of cultural heritage assets in readily accessible archive to make a permanent record.	returned to its previous state (Mitigation Item P03-CH7).

DMRB Stage 3 Environmental Statement



SEA	Discipline of	07.0	Recommendations fo	r later DMRB Stages	Record ho	w addressed at:
Identified Constraints	Constraint	SEA Comment	DMRB Stage 2	DMRB Stage 3	DMRB Stage 2	DMRB Stage 3
Listed Building LB (Cat B)	Guay Farmhouse LB 337062	Particular historic environment pinch point at Guay Farm. Embed range of strategic principles on historic environment and avoidance where possible. Need to balance LB issues with railway, River Tay SAC and flood plain constraints to the opposite (western) side of the carriageway. Ancient Woodland (SNO, 1a) identified on eastern side of carriageway. Where avoidance is not possible within the 200m online corridor, DMRB2 alignment studies should consider local alternatives outwith the 200m corridor.	Secure early consultation with Historic Scotland, Local Authority archaeology or heritage team and other relevant stakeholders (as agreed with Transport Scotland and the A9 Dualling Environmental Steering Group), to present local options and determine their requirements/recommendations for additional studies/surveys to inform selection of a preferred alignment. Seek agreement on additional studies required for DMRB Stage 3 assessment of visual impact/impact on setting.	Preferred alignment design and Environmental Statement to include appropriate record of consultation, all further studies undertaken, assessment of impacts on features and their setting, appropriate mitigation or measures and any construction stage monitoring required, to the satisfaction of Historic Scotland and other relevant stakeholders.	Potential impacts on the setting of the assets were identified, and broad recommendations for cultural heritage mitigation were presented.	A Level 2 building record (Historic England, 2016) will be undertaken of Guay Farmhouse prior to construction to record the asset in its current condition. A Level 2 record comprises a drawn record, a detailed measured plan, drawn elevations of areas to be removed/impacted by the alterations, and a photographic and written record (Mitigation Item P03-CH9). To mitigate the removal of the gable end of Guay Farmhouse Wing during construction, two phases of alterations are proposed. The first phase will be the alteration of the Wing, and the second phase will be the implementation of measures to protect the longevity of the Wing (Mitigation Item P03-CH10). To mitigate any potential for accidental damage to Guay Farmhouse during construction, the asset will be protected as required following discussion between PKC and Transport Scotland's appointed contractor and will be clearly demarcated with protective fencing and appropriate signage (Mitigation Item P03-CH11). To facilitate the long-term future of the farmhouse, a detailed strategy will be developed for the marketing management of Guay Farmhouse through to its for resale after construction of the proposed scheme; completing any necessary initial remedial works to allow Guay Farmhouse to be let as a residential property (such as internal and external maintenance and repair); letting the property through to the commencement of construction of the proposed scheme in the immediate vicinity of the property; maintaining the property through the construction works whilst empty; completing for carrying out improvements as necessary and introducing planting and landscaping to ensure it remains an attractive and viable dwelling prior to its resale; and marketing the property for resale and completing its sale (Mitigation Item P03-CH17).

DMRB Stage 3 Environmental Statement



SEA	Discipline of	071.0	Recommendations fo	r later DMRB Stages	Record ho	w addressed at:
Identified Constraints	Constraint	SEA Comment	DMRB Stage 2	DMRB Stage 3	DMRB Stage 2	DMRB Stage 3
National Scenic Areas (NSA)	River Tay (Dunkeld) NSA	Southern stretch of this section runs through River Tay (Dunkeld) NSA. Potential for direct impact on the NSA throughout this area. Refer to A9 Strategic Landscape Review (ER Addendum Appendix F) and secure early consultation with SNH to discuss landscape issues related to NSA special qualities. Aim to minimise impacts on woodland within the NSA. Consider opportunities for enhanced laybys and viewpoints in consultation with SNH.	Embed strategic landscape principles and secure early consultation with SNH to discuss DMRB2 alignment options and determine their recommendations and requirements to inform the selection of a preferred alignment. Seek opportunities to incorporate key views to enhance visitors' experience of this NSA, including potential for enhanced laybys and interpretation features. Agree range of visual receptors with SNH for detailed Landscape and Visual Impact Assessment (LVIA) at next stage.	Stage 3 LVIA to inform design to integrate the road with its surroundings and minimise the impacts of road furniture. Preferred alignment design and Environmental Statement to include appropriate record of consultation, all further studies undertaken, assessment of landscape and visual impacts, appropriate mitigation measures and any construction stage monitoring required, to the satisfaction of SNH.	SNH have been consulted as part of the Environmental Steering Group for their opinions on the proposed route options and the assessment methodology. Opportunities to provide enhanced laybys along the route, including the locations suggested in the Enhanced Layby Strategy developed as part of the A9 Dualling Programme Environmental Design Guide, have been considered as part of the design development of the route options. Technical constraints have ruled out many opportunities, but further consideration will be made as part of the Stage 3 assessment following the identification of a preferred route option. SNH have been consulted on the viewpoint locations, and their input has been taken into consideration. Some of the locations they have recommended have been omitted from the Stage 2 assessment as the viewpoints would not aid in the selection of a preferred route, but they may be incorporated into the Stage 3 assessment as receptors.	DMRB Stage 3 LVIA has informed design to integrate the road with its surroundings and minimise the impacts of road furniture. DMRB Stage 3 LVIA has informed design to integrate the road with its surroundings and minimise the impacts of road furniture. The ES includes a record of consultation and further studies undertaken as well as an assessment of the landscape and visual impacts along with mitigation measures as discussed in Chapter 13 (Landscape). The proposed ecological and landscape mitigation for the proposed scheme are also shown on Figure 13.5. Consultation with SNH, CNPA and HES has been undertaken throughout the DMRB Stage 3 process which is outlined in Chapter 7 (Consultation and Scoping) and the accompanying Appendix A7.2 (Summary of Consultation Responses)
SEPA 1:200 year Flood Zone	Existing route crosses Flood Zone at various points in this section, given the proximity to the River Tay and its tributaries	Refer to ER Addendum Appendix G (Strategic Flood Risk Assessment). Embed strategic principles approach to avoid encroachment in the flood zone. Any loss of functional flood plain will require compensatory storage. Preference would be to avoid encroachment in the flood zone; however, this stretch is bordered by the River Tay flood zone to the west side of the road and is unlikely to be avoided at all locations.	Alignment studies should aim to strike a balance between avoidance of other constraints and the 1:200 year flood zone. Secure early consultation with SEPA to determine alternative alignment option impacts and to determine requirements for flood risk assessment, SUDS drainage and CAR requirements. Consider where drainage designs can include improved wildlife crossing and fish passage opportunities.	Preferred alignment design and Environmental Statement to include appropriate record of consultation, all further studies undertaken and any mitigation or compensatory works required. Incorporate appropriate drainage, compensatory storage and management measures to ensure no net change to flood risk. Make recommendations to avoid works compounds within the functional floodplain where possible.	Alignments have been developed to minimise encroachment in floodplain given other environmental constraints and the selection of an online route. Detailed hydrology and Flood Risk Assessment underway and engagement with SEPA commenced to agree baseline and detail for Stage 3 assessment. Multi objective design workshops held to ensure all watercourse crossing design constraints understood and to inform design at Stage 3.	The proposed scheme has been assessed for flood risk and avoids encroachment into the functional floodplain where practicable. Flood risk assessment has included the assessment of the route against the SEPA 1:200-year flood zone and the hydraulic modelling flood zone (for high flood risk locations). See Appendix A11.3 (Flood Risk Assessment) for further information. Compensatory storage has been investigated for a number of locations along the route in order to offset any impacts to flood risk due to floodplain encroachment///the proposed scheme. Ongoing consultation with SEPA has

A9 Dualling Programme: Tay Crossing to Ballinluig DMRB Stage 3 Environmental Statement



SEA	Discipline of	07.0	Recommendations fo	r later DMRB Stages	Record ho	w addressed at:
Identified Constraints	Constraint	SEA Comment	DMRB Stage 2	DMRB Stage 3	DMRB Stage 2	DMRB Stage 3
						occurred throughout the DMRB Stage 3 assessment to discuss flood risk issues/complexities. For further information regarding consultation see Chapter 7 (Consultation and Scoping) and the accompanying Appendix A7.2 (Summary of Consultation Responses).
						Culverts and crossings have been designed with input from flood risk specialists. Channel realignments have also been designed to allow for existing flows and mimic (if not improve) existing channel cross-sections.
Highland Mainline (HML)	No HML crossings in this section	HML is a significant physical constraint, running in proximity to west of the A9 between Guay and Kindallachan. Presents a significant constraint to dualling around a number of heritage features discussed above.	Secure early consultation with Historic Scotland to present local alignment options showing HML constraints between Guay and Kindallachan.	Preferred alignment design and Environmental Statement to include appropriate record of consultation, all further studies undertaken and any mitigation or compensatory works required.	Network Rail has been consulted at DMRB Stage 2 to obtain general guidance about design standards and to outline potential conflicts between the dualling proposals and the HML. Further consultation is proposed to take place at DMRB Stage 3 as the design of the structure is developed.	There has been ongoing consultation with Network Rail (NR) during the DMRB Stage 3 design development phase. This is to ensure NR is provided with updates in relation to interfaces with NR infrastructure. See Appendix A7.2 (Summary of Consultation Responses) for details.
Non- Motorised Users (NMU)	NCN77 and Perth & Kinross Council Core Paths within this section Approx. crossing refs.: NO004439 NN999487 NN997491 NN991506 NN990507 NN988511 NN987513	Refer to ER Addendum Section 4.3 Various Core Paths and the NCN77 run in proximity and/or parallel to the A9 in this section. Refer to and embed strategic principles approach to NMU and cycling provisions. NMUs to include pedestrians, cyclists and equestrians. Non-motorised user (NMU) access may be impacted during construction and existing crossing points may be rationalised to provide safer crossing opportunities.	Secure early consultation with relevant stakeholders (as agreed with Transport Scotland and the A9 Dualling Environmental Steering Group) to determine alternative alignment option impacts on NCN77, Core Paths and any other identified NMU routes and crossings to inform selection of the preferred dualling alignment. Consider opportunities to provide wildlife crossing opportunities to secure multi-species benefit and to link NCN77 to enhanced layby facilities. Selection of preferred alignment to be informed by an 'access audit', as required by Chapter 6 of Transport Scotland's 'Roads for All: Good Practice Guidance for Roads' and a 'cycle audit', as required by Chapter 11 (see Fig. 11.1) of Transport Scotland's 'Cycling by Design' good practice guidance	Preferred alignment design and Environmental Statement to include appropriate record of consultation, all further studies undertaken and any mitigation or works required to ensure an equal or better standard of provision than existing. DMRB3 EIA to include construction mitigation requirements on provision of appropriate diversionary routes and signage to maintain overall access provisions during construction.	Consultation was undertaken with various access, cycling, equestrian and walking groups to inform the baseline assessment and ensure the path network described and assessed is accurate. The consultees provided information regarding the locations and usage of paths and key crossing points. Rights of way data received from ScotWays. Consultation with various stakeholders also took place at two NMU forums (in November 2014 and May 2015). Information gained from stakeholders during these discussions was used to inform the baseline in this assessment. The consultation process informed the identification of potential conflict areas between NMUs and the proposed route options assessed in the Stage 2 Report. This information will also be taken into account during the Stage 3 assessment, where mitigation measures will be further developed and incorporated into the design of the preferred route option.	The proposed scheme assessed at DMRB Stage 3 is the result of an iterative design process in which provision for maintaining and enhancing NMU journeys was taken into account, as set out in Chapter 5 (The Proposed Scheme). As such, the proposed scheme already includes embedded mitigation such as an overbridge, provision of footpaths/cycleways and planting which reduces impacts on NMUs. Chapter 9 (People and Communities - All Travellers) and accompanying Appendix A9.1 (People and Communities: All Travellers Full Assessment Results for NMU Routes and Access to Outdoor Areas) provides the full assessment of impacts on NMUs including journey length changes and impacts on amenity value. Construction mitigation for NMUs is set out in the Standard Mitigation Commitments and specific mitigation measures during operation for NMUs are set out in Chapter 9 (People and Communities - All Travellers) Section 9.5 (Mitigation). Development of the proposed scheme design has taken into account the need to

DMRB Stage 3 Environmental Statement



SEA	Discipline of	051.0	Recommendations fo	r later DMRB Stages	Record how addressed at:		
Identified Constraints	Constraint	SEA Comment	DMRB Stage 2	DMRB Stage 3	DMRB Stage 2	DMRB Stage 3	
					Additional consultation will also be undertaken at Stage 3 to inform the assessment process and the development of mitigation.	maintain access for NMUs along and across roads and paths directly affected by the new road infrastructure. The proposed scheme design includes the provision of an overbridge and new footways and cycleways which maintain and improve access along existing NMU routes during construction.	
	The existing A9 is considered to act as a barrier	Embed the principle of 'multi-species benefits through route permeability' across all design sections.	Identification and implementation of wildlife crossing provisions should be embedded within the consideration of drainage, watercourse crossings, NMU routes, junctions and other road and rail crossing opportunities. Secure early consultation with SNH on appropriate species and habitat survey requirements.	Preferred alignment design and Environmental Statement to include appropriate record of consultation, all further studies and surveys undertaken and any mitigation, compensatory or improvement works required to deliver a suitable range of wildlife (e.g. mammals and fish) crossings and passes.	The provision of wildlife crossing opportunities as a principle is included within the project. Detailed provision will be considered at DMRB Stage 3. Regular meetings with the ESG have been held. Consultation with SNH has been undertaken during ESG meetings.	Regular meetings with the ESG have been held. Consultation with SNH has been undertaken during ESG meetings; and guidance from the ESG has been taken into account in the design and location of wildlife crossings, associated fencing and landscape planting. Details of consultation undertaken is detailed in Chapter 7 (Consultation and Scoping and accompanying Appendix A7.2 (Summary of Consultation Responses).	
Wildlife Crossings	to species movement However, the location of any wildlife crossing opportunities was outwith the scope of the SEA					The provision of wildlife crossing opportunities (including, providing mammal ledges on culverts, dry mammal underpasses and fencing to direct animals towards these features) was informed by the DMRB Stage 3 survey data and data received through the consultation process. assessments Locations were refined through discussion with other disciplines including highways, drainage and landscape.	
	SEA					The location of crossing points and mammal fencing in relation to the proposed scheme is shown on Figure 13.5. Measures have also been identified to ensure the implementation of the appropriate mitigation (Mitigation Items P03-E42, P03-E43, P03-E44, P03-E45, P03-E47 and P03-E48).	